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OMB No. 0651-0027 (exp. 5/31/2002)		
To the Honorable Commissioner of Patents and Trademarks. Please re	ecord the attached original documents or copy thereof.	
1. Name of conveying party(ies): Rudiger Franke; Peter Terwiesch; Markus Meyer; Christian Klose; Karl-Hermann Ketteler Additional name(s) of conveying party(ies) attached? yes no 3. Nature of Conveyance:	2. Name and address of receiving party(ies): Name: Bombardier Transportation GmbH Street Address: Saatwinkler Damm 43 City: Berlin State: Zip Code: 13627 Country: Germany Additional name(s) & address(es) attached?	
Assignment	□ yes ⊠ no	
4. Application number(s) or patent number(s): If this document is filed together with a new application, the execution date of the application is A. Patent Application No(s). B. Patent No(s).		
Additional numbers attached? yes no		
5. Name & address of party to whom correspondence concerning document should be mailed:	6. Total number of applications and patents involved One	
David P. Owen HOWREY SIMON ARNOLD & WHITE CityPoint One Ropemaker Street London EC2Y 9HS United Kingdom	7. Total fee (37 C.F.R. § 3.41)\$ 40.00 ☐ Enclosed ☐ Authorized to be charged to Deposit Account	
Tel: 011 44 20 7628 3303	8. Deposit Account Number: 08-3038	
DO NOT USE THIS SPACE		
9. Statement and signature		
To the best of my knowledge and belief, the foregoing inf true copy of the original document. David P. Owen Name of Person Signing Registration No. 43,344 Total number	Formation is true and correct and any attached copy is a 29 July 2002 Date er of pages including cover sheet, attachments and document	
Mail documents to be recorded with required cover sheet information to: Commissioner of Patents and Trademarks, Box Assignments Washington, D.C. 2023.1		

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ASSIGNMENT	
In consideration of the sum of One Dollar (\$1.00) or evaluable consideration paid to each of the undersigned, the unassign(s) to Bombardier Transportation GmbH, Saatwinkl Germany (the Assignee) his/her entire right, title and interest check applicable box(es): Solution of the undersigned, the undersigned, the unassign of the Assignee of the uniterest check applicable box(es): and throughout the world,	dersigned hereby sell(s) and er Damm 43, D-13627 Berlin,
in the invention(s) known as Method for Power Optimization Efficienty that Depends on the Operating Point for which a United States of America has (have) been executed by the understoom as United States Application No. filed on thereon, in any and all Letters Patent(s) therefor, and in any arrenewals, reexaminations of such applications or Letters Patent continuation applications thereof, to the full end of the term of Patent(s) issue, including all claims, if any, that may have arist date of this assignment, such entire right, title and interest to be named Assignee to the same extent as they would have been had this assignment and sale not been made.	application(s) for patent in the dersigned on 24 January 2002 (also), in any and all applications and all reissues, extensions, at(s) and divisional and ar terms for which such Letters en for infringement prior to the be held and enjoyed by the above-
The undersigned agree(s) to execute all papers necessal application(s) and any continuing (continuation, divisional, or reexamination or corresponding application(s) thereof and also in connection with such applications as the Assignee may deep	continuation-in-part), reissue, o to execute separate assignments
The undersigned agree(s) to execute all papers necessarinterference that may be declared concerning the application (so divisional, or continuation-in-part), reissue or reexamination as with the Assignee in every way possible in obtaining evidence interference.	s) or any continuing (continuation, application thereof and to cooperate
The undersigned hereby represents that the undersigned interest herein assigned, and that the undersigned has not execute agreement in conflict therewith.	
IN WITNESS WHEREOF, executed by the undersign name(s).	ed on the date(s) opposite their
Signature: hi My Soula Rüdiger Franke	Date:
Signature:Peter Terwiesch	Date:
Signature:Markus Meyer	
Markus Meyer	

_____ Date: __

Karl-Hermann Ketteler

Christian Klose

Signature: _

Signature: _

ASSIGNMENT	
In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and assign(s) to Bombardier Transportation GmbH , Saatwinkler Damm 43 , D-13627 Berlin , Germany (the Assignee) his/her entire right, title and interest check applicable box(es):	
	
in the invention(s) known as Method for Power Optimization in a Vehicle/Train having an Efficienty that Depends on the Operating Point for which application(s) for patent in the United States of America has (have) been executed by the undersigned on 24 January 2002 (a known as United States Application No. filed on), in any and all applications thereon, in any and all Letters Patent(s) therefor, and in any and all reissues, extensions, renewals, reexaminations of such applications or Letters Patent(s) and divisional and continuation applications thereof, to the full end of the term or terms for which such Letters Patent(s) issue, including all claims, if any, that may have arisen for infringement prior to the date of this assignment, such entire right, title and interest to be held and enjoyed by the abovenamed Assignee to the same extent as they would have been held and enjoyed by the undersign had this assignment and sale not been made.	ilso
The undersigned agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.	s
The undersigned agree(s) to execute all papers necessary in connection with any interference that may be declared concerning the application(s) or any continuing (continuation divisional, or continuation-in-part), reissue or reexamination application thereof and to coopera with the Assignee in every way possible in obtaining evidence and going forward with such interference.	ı, ate
The undersigned hereby represents that the undersigned has full right to convey the enti- interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict therewith.	ire
IN WITNESS WHEREOF, executed by the undersigned on the date(s) opposite their name(s).	
Signature: Date:	
Rüdiger Franke Signature: Date: 2002-05-20 Peter Terwiesch	_
Signature: Date:	

Signature: _____ Date: _____

_____ Date: _____

Karl-Hermann Ketteler

Markus Meyer

Signature: ____

ASSIGNMENT	
In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and assign(s) to Bombardier Transportation GmbH , Saatwinkler Damm 43 , D-13627 Berlin , Germany (the Assignee) his/her entire right, title and interest check applicable box(es):	
for the United States of America (as defined in 35 U and throughout the world,	J.S.C. § 100),
in the invention(s) known as Method for Power Optimization Efficienty that Depends on the Operating Point for which ap United States of America has (have) been executed by the unde known as United States Application No. filed on thereon, in any and all Letters Patent(s) therefor, and in any and renewals, reexaminations of such applications or Letters Patent continuation applications thereof, to the full end of the term or Patent(s) issue, including all claims, if any, that may have arised date of this assignment, such entire right, title and interest to be named Assignee to the same extent as they would have been he had this assignment and sale not been made.	oplication(s) for patent in the ersigned on 24 January 2002 (also in any and all applications all all reissues, extensions, (s) and divisional and terms for which such Letters in for infringement prior to the held and enjoyed by the above-
The undersigned agree(s) to execute all papers necessar application(s) and any continuing (continuation, divisional, or creexamination or corresponding application(s) thereof and also in connection with such applications as the Assignee may deem	continuation-in-part), reissue, to execute separate assignments
The undersigned agree(s) to execute all papers necessar interference that may be declared concerning the application(s) divisional, or continuation-in-part), reissue or reexamination ap with the Assignee in every way possible in obtaining evidence a interference.	or any continuing (continuation, plication thereof and to cooperate
The undersigned hereby represents that the undersigned interest herein assigned, and that the undersigned has not execu agreement in conflict therewith.	
IN WITNESS WHEREOF, executed by the undersigned name(s).	d on the date(s) opposite their
Signature:	Date:
Signature:Peter Terwiesch	Date:

ASSIGNMENT
In consideration of the sum of One Dollar (\$1.00) or equivalent and other good and
valuable consideration paid to each of the undersigned, the undersigned hereby sell(s) and
assign(s) to Bombardier Transportation GmbH, Saatwinkler Damm 43, D-13627 Berlin,
Germany (the Assignee) his/her entire right, title and interest
check applicable box(es):
for the United States of America (as defined in 35 U.S.C. § 100),
and throughout the world,
in the invention(s) known as Method for Power Optimization in a Vehicle/Train having an
Efficienty that Depends on the Operating Point for which application(s) for patent in the
United States of America has (have) been executed by the undersigned on 24 January 2002 (also
known as United States Application No. filed on), in any and all applications
thereon, in any and all Letters Patent(s) therefor, and in any and all reissues, extensions,
renewals, reexaminations of such applications or Letters Patent(s) and divisional and
continuation applications thereof, to the full end of the term or terms for which such Letters
Patent(s) issue, including all claims, if any, that may have arisen for infringement prior to the
date of this assignment, such entire right, title and interest to be held and enjoyed by the above-
named Assignee to the same extent as they would have been held and enjoyed by the undersigned

The undersigned agree(s) to execute all papers necessary in connection with the application(s) and any continuing (continuation, divisional, or continuation-in-part), reissue, reexamination or corresponding application(s) thereof and also to execute separate assignments in connection with such applications as the Assignee may deem necessary or expedient.

had this assignment and sale not been made.

The undersigned agree(s) to execute all papers necessary in connection with any interference that may be declared concerning the application(s) or any continuing (continuation, divisional, or continuation-in-part), reissue or reexamination application thereof and to cooperate with the Assignee in every way possible in obtaining evidence and going forward with such interference.

The undersigned hereby represents that the undersigned has full right to convey the entire interest herein assigned, and that the undersigned has not executed, and will not execute, any agreement in conflict therewith.

AS	SIGNMENT
In consideration of the sum of One I valuable consideration paid to each of the u	Dollar (\$1.00) or equivalent and other good and ndersigned, the undersigned hereby sell(s) and GmbH, Saatwinkler Damm 43, D-13627 Berlin, t, title and interest
Efficienty that Depends on the Operating United States of America has (have) been exknown as United States Application No. thereon, in any and all Letters Patent(s) ther renewals, reexaminations of such application continuation applications thereof, to the full Patent(s) issue, including all claims, if any, and the of this assignment, such entire right, tit	ns or Letters Patent(s) and divisional and end of the term or terms for which such Letters that may have arisen for infringement prior to the le and interest to be held and enjoyed by the above- would have been held and enjoyed by the undersigned
application(s) and any continuing (continuate	all papers necessary in connection with the tion, divisional, or continuation-in-part), reissue, (s) thereof and also to execute separate assignments Assignee may deem necessary or expedient.
interference that may be declared concerning divisional, or continuation-in-part), reissue of	all papers necessary in connection with any g the application(s) or any continuing (continuation, or reexamination application thereof and to cooperate obtaining evidence and going forward with such
	hat the undersigned has full right to convey the entire igned has not executed, and will not execute, any
IN WITNESS WHEREOF, executed name(s).	l by the undersigned on the date(s) opposite their
Signature:	Date:
Signature: Rüdiger Franke	
Signature:	Date:
Doton Touvriosch	-

Signature: Date:

Rüdiger Franke

Date:

Peter Terwiesch

Signature: Date:

Markus Meyer

Signature: Date:

Christian Klose

Signature: Date:

Christian Klose

Signature: Date:

Karl-Hermann Ketteler